



User Guide for CX2 Receiver



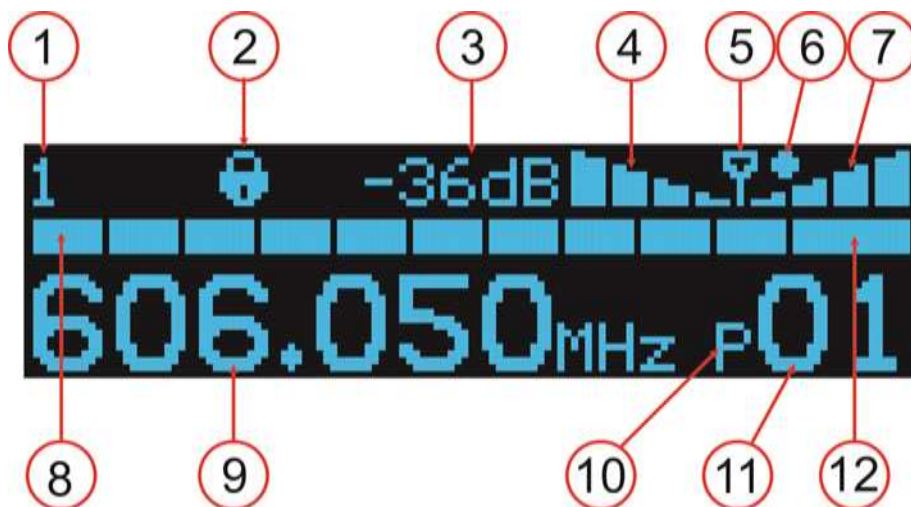
The CX2 receiver is designed to be fitted into the receiver slot in the professional Panasonic or Sony cameras.

Fit the CX2 receiver into the appropriate slot of the camera taking care to align the D-type plug on the bottom of the CX2 receiver with the internal D-type socket of the slot. Push the receiver home firmly, but gently. Fix the supplied screws to the head of the CX2 receiver taking care not to over tighten. Switch on the camera and the display on the CX2 will light up and the default display shown below should be visible on the OLED display.



To access the receiver parameters first select the receiver by pressing the left or right buttons to select receiver 1 or receiver 2 respectively.

The screen will be displayed as shown below:



KEY

- 1 Receiver number.
- 2 Menus Locked icon.
- 3 Current attenuator setting.
- 4 RF signal strength.
- 5 RF/Squelched icon (flashes when squelched).
- 6 Diversity indicator.
- 7 RF signal strength.
- 8 Current AF level bar indicator (0 – 10 segments).
- 9 Current Frequency.

- 10 Frequency selection mode (P = PRESET, U = USER, TUNE = TUNE mode).
- 11 Selected channel number (PRESET or USER modes only).
- 12 AF 'overload' indicator (**NOT** TX overload status).

When used in the internal slot of the Panasonic and Ikegami camcorders both audio channels are available through the d-type connection on the bottom of the receiver.

When used with the Sony camcorders, only channel 1 is available through the 15 pin d-type connector as Sony prevent access of the analogue channel 2 internally. Hence Audio Ltd provide both outputs on the 7 pin Binder socket on the head of the receiver. The accompanying dual output cable should be used to connect both channels to the audio inputs on the back of the camcorder.

To alter the receiver parameters for a desired receiver, press the 'down' arrow button (middle button) for two seconds and the main menu will appear:



Accessing the Frequency option

To access the frequency menu, use the left or right arrow to highlight the frequency icon and press the middle button.



A range of frequencies will be displayed. To choose a particular frequency, use the left or right arrow to highlight the desired frequency. To confirm this choice, press the middle button. The display will return to the main menu.



Accessing the AF Output option

To access the AF Output menu, use the left or right arrow to highlight the AF output icon and press the middle button. A range of output values will be displayed.



To choose a particular output setting, use the left or right arrow to highlight the desired value. To confirm this choice, press the middle button. The display will return to the main menu. Typically most cameras expect to see the level set to -12dB, or -24dB.



Accessing the Options menu

To access the Options menu, use the left or right arrow to highlight the Options icon and press the middle button. The Options menu will be displayed.



To change the settings of one of the seven 'Options' use the left or right arrow to highlight the desired icon and press the middle button to confirm this choice.



Exit

To return to the main menu use the left or right arrow to highlight the Exit icon. Press the middle button to confirm this.



The display will return to the main menu.



Freq Mode

To change the frequency mode of the receiver, use the left or right arrow to highlight the Freq Mode icon. Press the middle button to confirm this.



To select a particular frequency mode, use the left or right arrow to highlight the desired frequency mode. To confirm this choice, press the middle button. The display will return to the options menu. As a result of changing the frequency mode, the frequency menu will have changed. (?) The menu for preset, user, tune...



Freq Table

To access the Frequency Table menu, use the left or right arrow to highlight the Freq Table icon. To confirm this, press the middle button.



To choose a particular Freq Table value, use the left or right arrow to highlight the desired value. To confirm this choice, press the middle button. The display will return to the options menu.



RX Power

To change the RX Power, use the left or right arrow to highlight the RX Power icon.



To choose a particular RX Power, use the left or right arrow to highlight the desired value. To confirm this choice, press the middle button. The display will return to the options menu.



Display

To change the brightness or screensaver settings, use the left or right arrow to highlight the Display icon.



- **Brightness:** To change the brightness settings, use the left or right arrow to highlight the Brightness icon. To confirm this, press the middle button.



To change the brightness setting, use the left or right arrow to highlight the desired value. To confirm this, press the middle button. The display will return to the options menu.



- Screensaver:** To change the screensaver settings, use the left or right arrow to highlight the Screensaver icon. To confirm this, press the middle button.



To change the screensaver time, use the left or right arrow to highlight the desired time. To confirm this, press the middle button. The display will return to the options menu.



Lock

To choose to lock the receiver, use the right or left arrow to highlight the Lock icon. Once highlighted, press the middle button.



By confirming Yes, the receiver will be locked and the 'Options' menu will automatically be displayed.



To unlock the receiver, use the left or right arrow to highlight the 'Unlock' icon and press the middle button to confirm unlocking.



By confirming Yes by pressing the down arrow, the receiver will be unlocked and the 'Options' menu will be automatically displayed.

Restore

To choose to restore the receiver's original settings, use the left or right arrow to highlight the restore icon. To confirm this, press the down button.



To choose to restore the original settings use the left or right arrow to highlight 'yes'. To confirm this, press the middle button. The display will return to the start up display.



If on entering the Restore menu you decide not to restore the original settings, press the down button once 'No' is highlighted. The display will return to the options menu.

Scan

The Scan feature in the En2 receivers is a very useful tool to allow the user to be able to scan the stored frequencies in order to avoid any local interference.

On the main menu, the 'Scan' icon can be highlighted using the nav-switch.



i) **Tune** mode scan

In tune mode the display will show a spectrum analyser type scan. To implement this spectrum analyser scan the 'Tune' mode needs to be selected first in the **Frequency mode** section of the menu.

The frequency range of the table being scanned is displayed in the bottom left-hand side of the display. As the cursor moves along the screen any RF signals will be displayed showing the signal strength. The frequency associated with the instantaneous position of the cursor is displayed on the bottom right-hand corner of the display.



ii) **Free** or **TX** scan

To scan for **Free** or **TX** the Preset or User mode needs to be selected first in the **Frequency mode** section of the menu.

Once the scan icon is highlighted, press and hold the middle of the nav-switch to view the two scan options. The user can scan for a free channel or for a transmitter.



When the receiver detects no activity on any channel in 'Free' mode or detects a valid transmission in 'TX' mode, it will halt the scan. To resume scanning move the nav-switch left or right.

Press to accept the channel where the scan has stopped. The screen will change to display the set or cancel screen.

Move the nav- switch left or right to highlight the 'Set' or 'Cancel' option, then press the select that option.

If 'set' is selected, the indicated the channel number becomes the new current channel for the current frequency selection mode.

If 'cancel' is selected, the current channel remains unchanged. In either case, the display will return to the Top Level Menu screen.)

Info

On the main menu, the 'Info' icon can be highlighted using the nav- switch.



Once the info button is highlighted, press and hold the middle button to view the information for:

Serial number, Firmware Revision, Frequency table respectively.



□S/N □Rev □Table
043-100



□S/N □Rev □Table
765432-10



□S/N □Rev □Table
642

CX2 Technical specification

Frequency range	470 – 865MHz (specify at time of order)
Switching bandwidth	Up to 80MHz (typical) in 25kHz steps
Number of audio channels	2 (can be operated individually if required)
Receiver type	True-diversity
Tracking filters	Front end digitally controlled tracking filters
Number of frequency tables	Up to 10
Number of factory pre-set frequencies	32 in each table
Number of user selectable frequencies	32 in each table (selectable in 25kHz steps)
Manual tune mode	Yes - in 25kHz steps (can be saved to memory)
Scan modes	Scan for free channel Scan for transmitter Tune mode scan with spectrum analyser display
Modulation mode	Wideband FM
Frequency stability	±0.002%
Sensitivity	-96dBm (3.5uV) for >40dB SINAD
Image rejection	> 80dB
Audio frequency response	50 – 18kHz
Signal-to-noise ratio	>100dB (±45kHz deviation)
Total harmonic distortion	<0.3% typ.
Audio output voltage (balanced)	0dBV typ. (±45kHz deviation, 1kHz)
Audio output attenuator	0dB, -12dB, -24dB, -36dB (selectable)
Output connector	25 pin D-type
Display	OLED blue, 128x32 pixels
Control	3 position navigation switch
External supply voltage	6 – 18V DC (150mA @ 12V)
Operating temperature range	-20° C to +55° C
Weight	170 grams
Dimensions	88mm (W) x 121mm (H) x 31mm (D)
Accessories	Flexible clear antennae (straight) Flexible clear antennae (right-angle)